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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,459	06/05/2001	Hannu Paunonen	989.1032	5801

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EXAMINER

VU, KIEU D

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/874,459

Applicant(s)

PAUNONEN, HANNU

Examiner

Kieu D Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,5,7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 1 recites the limitation "the operating environment" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the status". There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the display device". There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the retrieved image". There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation " the display device ". There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation " the input device". There is insufficient antecedent basis for this limitation in the claim.

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Claim 11 recites the limitation "the status". There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "the display device". There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation " the input device". There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation " the display device ". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-7, 11-17, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Brinzer (USP 6031453).

Regarding claims 1 and 11, Brinzer teaches steps in a process control system, in which a terminal (Fig. 1) displays symbols illustrating parts of a process and information about the status of the process (col 1, lines 7-9), related to concrete places in the operating environment of the process (col 1, lines 42-44), comprising actuators, pumps, measuring devices, process equipment parts

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(col 3, lines 9-25), wherein corresponding graphic images are allotted to said concrete places (Fig. 3), indicating the location of the place in the process (col 3, lines 1-5), and these graphic images can be displayed in the operating environment of the process control system when the process is running (col 3, lines 37-40).

Regarding claims 2 and 12, Brinzer teaches the graphic image is displayed by activating with an input device of the terminal the representation corresponding to a desired concrete place and displayed on the display device of the terminal, said display device comprising at least one of a symbol and text that indicates said concrete place (see Fig. 3).

Regarding claims 3 and 13, Brinzer teaches that a separate graphic image is provided for each of a plurality of concrete places (pump, tank...in Fig. 3; col 3, lines 9-14).

Regarding claims 4 and 14, Brinzer teaches at least some of the concrete places are illustrated in the same graphic image and the place whose virtual image can be displayed as a graphic image of its own, is shown in the graphic image in a distinguished manner, said showing comprising one of by circling, by a changed background, by a symbol, and in a corresponding manner (Fig. 3).

Regarding claims 5 and 15, Brinzer teaches the graphic image can be displayed with the display device in parallel with corresponding information indicating the status of the process (col 3, lines 62-67), together with information related to the place being displayed, in such a way that the information is

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displayed ready within the retrieved graphic image or otherwise linked to it in such a way that it can be retrieved (col 4, lines 1-5).

Regarding claims 7 and 17, Brinzer teaches the graphic image comprises one or several portions which can be displayed as a separate graphic image of its own (col 3, lines 27-29), wherein said separate graphic image is at least one of a more detailed view and provided with additional data (col 4, lines 1-5).

Regarding claim 10, Brinzer teaches a process control system, comprising a terminal (Fig. 2) having a display device (10) and an input device (11 or 12), a user interface software connected to the terminal and to a process (inherent) said user interface software comprising, several process graphic images, (graphic images in Fig. 3), each of said several process graphic images containing symbols or representations of concrete places of a plant where the process to be controlled takes place (pump, tank...in Fig. 3; col 3, lines 9-25) said user interface software further comprising, several images that correspond to respective symbols or representations of at least one of said process graphic images (Fig. 3), and means for visualizing at least one of said several images, connected to the input device (11 or 12), upon activating a corresponding symbol or representation in said process graphic images (col 3, lines 9-25).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinzer and Itoh (EP 0716364).

Regarding claims 6 and 16, Brinzer differs from the claim in that Brinzer does not teach that the terminal is portable and is in a wireless data transmission connection with the process control system. However, such feature is known in the art as taught by Itoh. Itoh teaches an operator support system used in controlling a plant (col 1, lines 3-12). Itoh teaches that the display can be portable (col 16, lines 27-33). It would have been obvious to one of ordinary skill in the art, having the teaching of Brinzer and Itoh before him at the time the invention was made, to modify the system taught by Brinzer to include the portable terminal taught by Itoh with the motivation being to enhance the portability and flexibility of the system.

7. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinzer and Uchida (EP 0626697).

Regarding claims 8 and 18, Brinzer does not teach three-dimensional graphic image and enlarged image. However, such feature is known in the art as taught by Uchida. Uchida teaches a plant monitoring and diagnosing system (page 1) which comprises the enlarging the image of a selected location in the plant (lines 12-15 of page 15, Fig. 15). It would have been obvious to one of ordinary skill in the art, having the teaching of Brinzer and Uchida before him at the time the invention was made, to modify the system taught by Brinzer to include enlarging 3-dimensional image taught by Uchida with the motivation

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being to enable the operator to easily clarify portions of the plant as she or she desires.

8. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinzer and Takahara et al ("Takahara", USP 5412400).

Regarding claims 9 and 19, Brinzer does not teaches that the graphic image is a virtual image corresponding to a 3-dimensional view of the concrete place. However, such feature is known in the art as taught by Takahara. Takahara teaches a system for monitoring and operating the runs of a plant which comprises the displaying a virtual image corresponding to a 3-dimensional view of the concrete place (Fig. 19 and 24). It would have been obvious to one of ordinary skill in the art, having the teaching of Brinzer and Takahara before him at the time the invention was made, to modify the system taught by Brinzer to include the displaying 3-dimensional view of the concrete place taught by Takahara with the motivation being to enable the operator to view the concrete places of the plant in 3-dimensional view.

9. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach process control system which relates to the claimed invention.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kieu D. Vu whose telephone number is (703-605-1232). The examiner can normally be reached on Mon - Thu from 7:00AM to 3:00PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca, can be reached on (703- 308-3116).

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703)-872-9306

and / or:

(703)-746-5639 (use this FAX #, only after approval by Examiner, for "INFORMAL" or "DRAFT" communication. Examiners may request that a formal paper / amendment be faxed directly to them on occasions)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-3900).

Kieu D. Vu

12/28/03

  
BA HUYNH  
PRIMARY EXAMINER